

RCRA 101

Region 7

EPA

RCRA 101 Introduction

- **Purpose is to provide detailed review of regulations applicable to Colleges and Universities**
- **Overview of what inspectors look for**
- **Provide specific examples of violations noted during inspections**

STEP 1: Hazardous Waste Determination

- Has a hazardous waste determination been made?
- 40 CFR Part 262.11
- Determine if the waste is excluded under 261.4
- Determine if the waste is a listed hazardous waste under 261 subpart D
- If not listed, either test the waste or apply process knowledge

Typical Violations - HW Determinations

- Failure to make a Hazardous Waste Determination 40 CFR 262.11
- Inadequate Hazardous Waste Determination

STEP 2: Generator Classification

- What quantity of hazardous waste is generated?
- Are you a CESQG, SQG, or LQG (40 CFR Part 261.5)
- Identify and count all hazardous waste.
- CESQG: <100kg/mo; Acute H.W. 0-1 kg/mo
- SQG: >100 kg/mo and < 1000 kg/mo
- LQG: >1000kg/mo ; Acute H.W. > 1 kg/mo

Contiguous vs Non-contiguous Sites

- Addressed in Munitions Rule (62 FR 6653; 2/12/97)
- Non-HSWA rule became effective 8/12/97
- Hazardous waste munitions and explosives storage (40 CFR 265 subpart EE)
 - ◆ Applies to contiguous versus non-contiguous facilities
 - ◆ Determines whether separate EPA ID#'s are required
 - ◆ Examples of application to Colleges/Universities

Generator Requirements

- **Conditionally Exempt Small Quantity Generator (CESQG)** (40 CFR 261.5)
 - ◆ Hazardous Waste (HW) Determination
 - ◆ Keep containers of HW closed
 - ◆ Ship HW to a solid waste landfill (if allowed by the State)
 - ◆ Ship HW to a HW landfill
 - ◆ Accumulation of up to 1000 kg total
 - ◆ Manifests not required
 - ◆ Label used oil containers/tanks with the words “USED OIL”

Generator Requirements

- **Small Quantity Generator (SQG) (40 CFR 262.34(d))**
 - ◆ Hazardous Waste (HW) Determination
 - ◆ EPA ID number required
 - ◆ Keep containers of HW closed
 - ◆ Label and Date HW containers
 - ◆ HW Manifest required
 - ◆ Must have emergency coordinator on site or on call at all times
 - ◆ Post Emergency Information by the telephone

Generator Requirements

- **Small Quantity Generator (SQG)**
 - ◆ Train employees on proper handling of HW
 - ◆ Exception reports for manifests not returned
 - ◆ Label used oil containers/tanks with the words “USED OIL”
 - ◆ If accumulate >6000 kg or store over 180/270 days you’re subject to the permitting requirements (40 CFR 262.34(f))

Generator Requirements

- **Large Quantity Generator (LQG)** (40 CFR 262.34(a))
- Hazardous Waste (HW) determination
 - ◆ EPA ID number required
 - ◆ Ship HW to a permitted TSD facility
 - ◆ Store up to 90 days
 - ◆ Label and date the HW containers
 - ◆ HW manifest required
 - ◆ Exception report

Generator Requirements

- **Large Quantity Generator (LQG)**
 - ◆ Label used oil containers/tanks with the words “USED OIL”
 - ◆ Emergency equipment required (40 CFR 265.32)
 - ◆ Must have communication or alarm system (40 CFR 265.34)
 - ◆ Must maintain adequate isle space (40 CFR 265.35)
 - ◆ Must inspect the HW storage areas weekly (40 CFR 265.174)

Generator Requirements

- **Large Quantity Generator (LQG)**
 - ◆ **Contingency plan required (40 CFR 265.50-56)**
 - ✦ describe arrangements with local emergency response agencies
 - ✦ list the names addresses and phone numbers of persons qualified to act as emergency coordinators
 - ✦ list of all emergency equipment
 - ✦ location and physical description of the equipment
 - ✦ brief outline of equipment capabilities
 - ✦ evacuation plan

Generator Requirements

- **Large Quantity Generator (LQG)**
 - ◆ **Train employees on proper handling of HW (40 CFR 265.16)**
 - ✦ **trainer must be trained on HW management procedures**
 - ✦ **must ensure personnel are able to effectively respond to emergencies**
 - ✦ **training must be completed w/in 6 months of employment**

Generator Requirements

- **Large Quantity Generator (LQG)**
 - ◆ **Training records retention (40 CFR 265.16 d) & e))**
 - ✦ job title for each HW position
 - ✦ name of employee filling each HW position
 - ✦ written job description for each position
 - ✦ written description of each type of training
 - ✦ amount of each type of training
 - ✦ documentation of training completion
 - ✦ training records kept until facility is closed for current employees and 3 years for those who have left the facility

Generator Requirements

- **Large Quantity Generator (LQG)**
 - ◆ Annual refresher training required
 - ◆ Submit biennial HW report to the State
 - ◆ Exception reports for manifests not returned

Generator Requirements

■ Large Quantity Generator (LQG)

◆ Biennial Reporting Requirements (40 CFR 262.41)

- ✦ due March 1 each even numbered year
- ✦ covers generator activities during the previous year
- ✦ includes the following:
 - EPA ID #, name & address of generator
 - calendar year covered by the report
 - EPA ID #, address for each shipment of waste off-site to a TSD
 - Name and EPA ID# of each transporter
 - Description, EPA HW #, DOT Hazard class, quantity of HW shipped to TSD
 - Efforts taken to reduce volume and toxicity of waste generated
 - Changes in volume and toxicity of wastes actually achieved compared to previous years
 - Signed by generator or authorized representative

Treatment, Storage, & Disposal Facilities (TSDF)

- Applicable to the following:
 - ◆ SQG that store greater than 180 days/270 days or
 - ◆ LQG that store greater than 90 days
 - ◆ Treating HW or disposing HW on site

TSDF cont'd

- Must have a permit or have interim status if you're operating as a TSD (40 CFR Part 264/265)
- Submit a full RCRA Part B permit application
 - ◆ permit conditions are contained in 40 CFR 270 subpart C

Universal Waste

- **Requirements for Universal Waste (40 CFR 261.9)**
 - ◆ **batteries as described in 273.2**
 - ◆ **pesticides as described in 273.3**
 - ◆ **thermostats as described in 273.4**
 - ◆ **lamps as described in 273.5**

Land Disposal Restrictions

(40 CFR part 268)

- Wastes must meet LDR treatment standards prior to land disposal
- LDR establish treatment standards for each HW codes
- Applies to anyone disposing of HW in land disposal units
- Treatment is required prior to disposal **(40 CFR 268, subpart D)**
- Dilution is prohibited as a substitute for treatment

Land Disposal Restrictions

- Testing, tracking and record keeping requirements are in **40 CFR 268.7**
 - ◆ records must be kept for 3 years in non-authorized states or 5 years in authorized states that have not adopted the regulation
 - ◆ significant violations have been noted in this section due to incomplete, missing or illegible information

Other Violations

- Illegal disposal (SWDA 3005; 40 CFR 270.1c)
 - ◆ e.g., open containers which allow solvents to evaporate
- Incompatible storage (40 CFR 265.17)
 - ◆ e.g., storing acids next to solvent wastes
- Manifests (40 CFR 262 subpart B)
 - ◆ e.g., incomplete information on forms
- Labeling and Marking (40 CFR 262 subpart C)
 - ◆ e.g., drums of HW not labeled
 - ◆ e.g., accumulation start dates not annotated on labels

Other Violations

- Condition of Containers (**40 CFR 265.171; 265.172**)
 - ◆ e.g., placing acid waste in metal containers
 - ◆ e.g., dented or rusted containers
- Failure to minimize the possibility of a release (**40 CFR 265.31**)
 - ◆ e.g., storing wastes in open containers, incompatible containers
- Transporter (**40 CFR 263.20**)
 - ◆ e.g., taking waste from one campus across town to the TSD campus without a manifest

When in doubt ?

■ **Call your authorized State**

- KS: Kansas Department of Health and Environment
(785)296-1600
- MO: Missouri Department of Natural Resources
1-800-751-3176
- NE: Nebraska Department of Environmental Quality
(402)471-4210
- IA: EPA R7 Environmental Action Line
1-800-223-0425
- National Superfund/EPCRA/RCRA Hotline:
1-800-424-9346